

Capp  
**RECEIVED**

SOUTHERN ENVIRONMENTAL LAW CENTER

THE CANDLER BUILDING  
127 PEACHTREE STREET, SUITE 605  
ATLANTA, GA 30303-1800

FEB 26 2008

AIR PROTECTION BRANCH

Telephone 404-521-9900  
Facsimile 404-521-9909  
selcga@selcga.org

February 22, 2008

Charlottesville, VA  
Chapel Hill, NC  
Atlanta, GA

***VIA U.S. MAIL and ELECTRONIC MAIL***

Mr. Jac Capp  
Program Manager, Georgia Environmental Protection Division  
Stationary Source Permitting Program  
Air Protection Branch  
Atlanta Tradeport  
4244 International Parkway, Suite 120  
Atlanta, GA 30354

**Re: Power4Georgians' Plant Washington Prevention of Significant  
Deterioration Air Permit Application**

Dear Mr. Capp:

On behalf of Altamaha Riverkeeper, Environment Georgia, the Georgia Chapter of the Sierra Club, the Georgia Conservancy, Georgia Interfaith Power & Light, the Georgia River Network, Mothers & Others for Clean Air, Ogeechee-Canoochee Riverkeeper, the Turner Environmental Law Clinic at the Emory University School of Law, and Upper Chattahoochee Riverkeeper ("Commenters"), the Southern Environmental Law Center ("SELC") respectfully submits the following comments on the Prevention of Significant Deterioration ("PSD") Air Permit Application ("Application") submitted by Power4Georgians on January 17, 2008. We appreciate this opportunity to comment on the Application on behalf of the aforementioned organizations.

As a preliminary matter, Commenters note that a number of organizations, including the undersigned, previously requested that the Georgia Department of Natural Resources' Environmental Protection Division ("EPD") extend the deadline for submitting these comments to allow for more detailed evaluation of the Application. EPD denied this request for an extension, explaining that there will be additional "opportunities for the public to comment on the application as well as any draft permits that EPD develops." Therefore, these comments focus solely on some of the salient legal concerns EPD must address in evaluating the Application, and Commenters in no way limit or foreclose the right to provide future comments or technical evaluation of the project as it progresses.

**INTRODUCTION**

Power4Georgians proposes to construct a new 850-megawatt coal plant ("Plant Washington") at a time when the State of Georgia faces a host of serious air quality-related challenges, including mercury pollution that permanently damages the brains and central nervous systems of our most vulnerable citizens, global warming pollution that threatens our

fragile coastline with rising sea levels, and soot and smog pollution that contribute to asthma attacks. This proposal is unacceptable from both a legal and policy perspective. Construction of a new pulverized coal-fired power plant such as Plant Washington locks in a new commitment to an outmoded, highly polluting technology for the half-century lifespan of the plant. While we do not believe that there is necessarily a need for additional generating capacity in Georgia—or that a new coal-fired unit is the best way to meet future energy needs, assuming they exist—if a new facility is to be permitted, federal and state law require it to employ the cleanest technology available.

As Power4Georgians' Application fails to demonstrate that Plant Washington will employ such technology, EPD may not issue a permit without serious revisions to Power4Georgians' proposal. If EPD is to issue a draft permit – which Commenters do not believe is the appropriate course – EPD must insist that Power4Georgians consider new and cleaner technological controls including integrated gasification combined cycle, the best available control technology for carbon dioxide emissions, and maximum achievable control technology for mercury and other hazardous air pollutants that will be emitted. In addition to the following comments, Commenters reserve the right to submit public comments on any draft permit EPD issues.

## **I. INTEGRATED GASIFICATION COMBINED CYCLE IS THE BEST AVAILABLE CONTROL TECHNOLOGY FOR ALL PSD-REGULATED POLLUTANTS**

While Commenters believe that Georgia can meet its energy needs without the construction of new coal plants, if EPD must authorize new coal plants it should at a minimum require the plants utilize the most advanced and efficient technology available, Integrated Gasification Combined Cycle (“IGCC”) technology. IGCC is a commercially available, proven technology that is more efficient, produces lower emissions of criteria and hazardous air pollutants, and provides an opportunity for capturing carbon dioxide emissions. Any coal plant EPD considers permitting, therefore, must be no more polluting than an IGCC plant with appropriate add-on pollution controls.

Power4Georgians' permit application fails to even consider IGCC technology as part of the required best available control technology (“BACT”) analysis. IGCC is an available control technology that must be fully considered in the Application's BACT determination for each of the PSD-regulated pollutants. Power4Georgians' mischaracterization of IGCC as an “alternative plant design strateg[y]” that need not be considered,<sup>1</sup> is both technically flawed and unlawful.

### **A. Federal and State Law Require Evaluation of IGCC in the BACT Analysis for Plant Washington**

#### **1. Definition of BACT**

Section 165(a)(4) of the Clean Air Act (“Act”) provides that “no major emitting facility on which construction is commenced after August 7, 1977, may be constructed in any

---

<sup>1</sup> Power4Georgians Air Permit Application at 4-4.

area to which this part applies unless ... the facility is subject to the best available control technology for each pollutant subject to regulation under this chapter emitted from, or which results from, such facility.”<sup>2</sup> The Act defines best available control technology, or BACT to include: “the application of production processes and available methods, systems, and techniques, including fuel cleaning, clean fuels, or treatment or innovative fuel combustion techniques for control of each such pollutant.”<sup>3</sup> The Clean Air Act’s implementing regulations include a substantively identical definition of BACT,<sup>4</sup> and the definition BACT found in the Georgia regulations incorporates the definition of BACT contained in the federal regulations for the PSD programs.<sup>5</sup>

## 2. IGCC Meets the Definition of BACT

### a. IGCC is a “Production Process” and an “Innovative Fuel Combustion Technique”

Congress intended for BACT to be a rigorous requirement when it adopted BACT in the 1977 Clean Air Act Amendments. Congress explained that the Clean Air Act “requires” BACT in order “to minimize emissions.”<sup>6</sup> Further, Congress established BACT as a “national requirement” to fulfill several fundamental purposes of the PSD program.<sup>7</sup> Congress explained that one of the core aims was to compel the “rapid adoption of improvements in technology as new sources are built.”<sup>8</sup> Indeed, Congress intended BACT as “[p]ossibly [the] most important” of the 1977 Act’s many technology-fostering measures.<sup>9</sup> This technology-forcing philosophy was “fundamental” to the adoption of the BACT requirement by Congress in 1977 and congressional efforts throughout the 1977 amendments “to accentuate technological innovation in the control of air pollutants.”<sup>10</sup>

The definition of BACT includes coal gasification techniques such as IGCC. BACT can be met through “production processes” or “innovative fuel combustion techniques.”<sup>11</sup> That is precisely what IGCC is—an innovative process or technique to extract energy from coal.

In addition, the BACT analysis also must consider IGCC because it is a method of fuel cleaning. The definition of BACT explicitly requires considering the application of “fuel cleaning ... for control of each pollutant.”<sup>12</sup> EPA has held that “[i]n deciding what constitutes BACT, the Agency must consider both the cleanliness of the fuel and the use of add-on

---

<sup>2</sup> 42 U.S.C. § 7475(a)(4) (emphasis added).

<sup>3</sup> 42 U.S.C. § 7479(3) (emphasis added).

<sup>4</sup> 40 C.F.R. § 51.166(b)(12) (part relating to “Requirements for Preparation, Adoption, and Submittal of Implementation Plans”).

<sup>5</sup> GA. COMP. R. & REGS. R.391-3-1-.02(7)(a)(2).

<sup>6</sup> S. Rep. No. 95-127 at 29 (1977).

<sup>7</sup> The 1977 amendments establish a “national requirement that each new major facility to be located in a clean air area install the best available control technology.” S. Rep. No. 95-127 at 12.

<sup>8</sup> S. Rep. No. 95-127 at 18.

<sup>9</sup> *Id.*

<sup>10</sup> *Id.* at 10.

<sup>11</sup> 42 U.S.C. § 7479(3).

<sup>12</sup> 42 U.S.C. § 7479(3).

pollution controls.”<sup>13</sup> In addition, the Environmental Appeals Board’s (“EAB”) Hawaiian Sugar decision states that “the definition of BACT includes consideration of both clean fuels and use of air pollution control devices.”<sup>14</sup> EPA recently reaffirmed its view that IGCC is an available method for cleaning and treating coal to remove air pollutants prior to combustion.<sup>15</sup>

b. IGCC Does Not “Redefine the Source”

As part of its rationale for failing to analyze IGCC as BACT, Power4Georgians notes that “alternative plant design strategies” need not be considered.<sup>16</sup> According to this argument, using a process other than supercritical pulverized coal (“PC”) plants would redefine source, and “[h]istorically, EPA has not considered the BACT requirement as a means to redefine the design of the source.”<sup>17</sup> In fact, IGCC and PC are the same source: both are processes for creating electricity from coal-fired steam generation. Thus, including IGCC as a technology in a BACT analysis for a coal-fired power plant is not tantamount to redefining the source.

Two EPA decisions explain the limited nature of the “redefining the source” policy. In In re: Pennsauken County, New Jersey, Resource Recovery Facility, the petitioner asked the EPA Administrator to deny a PSD permit to a municipal waste combustor and, instead, require the county to dispose of its waste by co-firing it with coal in existing power plants.<sup>18</sup> The petitioner in Pennsauken asked the EPA to order the applicant to engage in a different type of activity: electricity generation, rather than waste disposal. EPA determined that it would not “redefine the source” from a waste combustor to a power plant.

EPA subsequently reaffirmed the Pennsauken decision and explained that “source,” within the “redefining the source” policy, refers to a source category.<sup>19</sup> Furthermore, after clarifying the “redefining the source” policy as only applying when requiring a cleaner production process would change the “fundamental purpose” of the proposed project, EPA specifically rejected the idea that requiring consideration of cleaner fuel constitutes “redefining the source” because the fundamental project purpose, or source category, remains the same.<sup>20</sup> Therefore, contrary to Power4Georgians’ erroneous rationale, the “redefining the source” policy does not allow the permitting agency to blindly accept the source design, or fuel, proposed by the applicant.<sup>21</sup>

Applying the “redefining the source” policy correctly, IGCC is not a different “source” from supercritical PC because it is the same source category (coal-fired electrical generating unit). EPA has confirmed this treatment. In 1998, EPA adopted a nitrogen oxide

<sup>13</sup> In re: Inter-Power of New York, 5 E.A.D. 130, 1994 EPA App. LEXIS 33, \*12 (EAB, March 16, 1994) (internal citation omitted).

<sup>14</sup> In re Hawaiian Commercial & Sugar Co., PSD Appeal No. 92-1 at 5 n.7 (EAB, July 20, 1992).

<sup>15</sup> 70 Fed. Reg. 9706, 9711 (Feb. 28, 2005) (describing use of gasification to limit SO<sub>2</sub> emissions).

<sup>16</sup> Power4Georgians Application at 4-4.

<sup>17</sup> U.S. Environmental Protection Agency, *Draft New Source Review Workshop Manual*, B.13 (Oct. 1990), available at <http://www.epa.gov/ttn/nsr/gen/wkshpman.pdf>.

<sup>18</sup> 2 E.A.D. 667, 1988 EPA App. LEXIS 27 (Adm’r, Nov. 10, 1988).

<sup>19</sup> In re: Hibbing Taconite Co., 2 E.A.D. 838, 1989 EPA App. LEXIS 24, \*11 n.12 (Adm’r, July 19, 1989) (emphasis added).

<sup>20</sup> Id. at \*12 (emphasis added).

<sup>21</sup> Id.

limit as part of its new source performance standards that applied to all new electric generating units, regardless of whether they use pulverized coal or IGCC combustion technologies.<sup>22</sup> On February 27, 2006, EPA revised its new source performance standards for the new electric generating units source category and, again, did not distinguish between PC and IGCC technologies.<sup>23</sup> Further, both IGCC and supercritical pulverized coal fall with the same Standard Industrial Classification code (4911).<sup>24</sup> Thus, IGCC does not “redefine the source.”

c. Other States Have Recognized that IGCC Must be Considered

Several states have recently considered whether IGCC must be included in the BACT analysis for proposed new coal-fired sources and have concluded that it must. In March 2003, the State of Illinois required the applicant for a proposed coal-fired plant to conduct a robust analysis of IGCC in its BACT analysis<sup>25</sup> and subsequently formally informed EPA that Illinois has “concluded that it is appropriate for applicants for [coal-fired power] plants to consider IGCC as part of their BACT demonstrations. In this regard, IGCC is an alternative production process that can be used with coal to generate electricity.”<sup>26</sup>

New Mexico advised a permit applicant that it would have to analyze IGCC as part of the BACT analysis for a proposed new pulverized coal power plant,<sup>27</sup> and later reaffirmed this requirement, notifying the applicant that “‘cost’ cannot be the basis for technical infeasibility and that the Integrated Gasification Combined Cycle (IGCC) and the Circulating Fluidized Bed Boiler (CFB) are technically feasible and must be further evaluated in the BACT analysis.”<sup>28</sup> The Michigan Department of Environmental Quality recently proposed to require an analysis of IGCC in the BACT determination for coal-fired power plants.<sup>29</sup> Finally, the Northeast States for Coordinated Air Use Management (“NESCAUM”), representing air quality regulators in Maine, New Hampshire, Vermont, Massachusetts, Connecticut, Rhode Island, New York and New Jersey, has stated that “IGCC is a highly efficient coal-based electrical generation technology that also results in substantial reductions in emissions of air contaminants, and therefore must, on a case-specific basis, ‘taking into account energy, environmental, and economic impacts and other costs,’ be considered in a BACT analysis for any new coal-fired power plant.”<sup>30</sup> NESCAUM has also filed an *amicus* brief in a PC plant

<sup>22</sup> 63 Fed. Reg. 49,442 (Sept. 16, 1998).

<sup>23</sup> 71 Fed. Reg. 9866 (Feb. 27, 2006).

<sup>24</sup> <http://www.epa.gov/tri/report/siccode.htm>. See also, <http://ndep.nv.gov/bapc/download/ls/app.pdf> (supercritical pulverized coal); [http://www.dep.state.fl.us/air/permitting/construction/ouc-stanton/stanton\\_unit/011TechEval-%200950137-011-AC-DRAFT.PDF](http://www.dep.state.fl.us/air/permitting/construction/ouc-stanton/stanton_unit/011TechEval-%200950137-011-AC-DRAFT.PDF) (IGCC).

<sup>25</sup> Letter from Donald E. Sutton, Illinois Environmental Protection Agency Division of Air Pollution Control, to Jim Schneider, Indeck-Elwood, LLC (March 8, 2003) (Attachment 47).

<sup>26</sup> Letter from Renee Cipriano, Director, Illinois Environmental Protection Agency, to Mr. Thomas Skinner, Regional Administrator, U.S. EPA Region V (March 19, 2003) (Attachment 48).

<sup>27</sup> Letter from Richard L. Goodyear, New Mexico Environment Department, to Larry Messinger, Mustang Energy Company, LLC (Dec. 23, 2002) Attachment 50).

<sup>28</sup> Letter from Raj Solomon, New Mexico Environment Department, to Ms. Diana Tickner, Vice President, Peabody Energy, 1 (Sept. 16, 2005).

<sup>29</sup> Michigan DEQ, Fact Sheet: Environmental Permitting of Coal-Fired Power Plants in Michigan (Revised July 26, 2007).

<sup>30</sup> Letter from Northeast States for Coordinated Air Use Management to Texas Commission on Environmental Quality re Application of Sandy Creek Energy Associates (Dec. 5, 2005).

air permit appeal arguing that IGCC should be evaluated as part of any BACT determination for a PC plant.<sup>31</sup>

**B. Even if Federal Law Does Not Require Evaluation of IGCC, Georgia Has Discretion to Require Its Consideration and Should Require Power4Georgians to Consider IGCC**

Although the Clean Air Act already requires consideration of IGCC in the BACT analysis for a coal-fired power plant, EPD also has the independent discretion to require its consideration even if federal law did not require it. The Act grants broad discretion to permitting agencies so long as they adopt standards that are no less stringent than federal requirements. Thus, in its Draft New Source Review Workshop Manual (“NSR Manual”)<sup>32</sup> issued in 1990, EPA noted that a permitting agency may require an applicant to “redefine the source” if it feels it is appropriate.<sup>33</sup> EPA’s Environmental Appeals Board has relied on this provision in upholding permitting agencies’ discretion to consider alternative production processes, stating that “redefinition of the source is not always prohibited” and that “[t]his is a matter for the permitting authority’s discretion.”<sup>34</sup> Thus, even if IGCC “redefines the source” (which the plain text of the Act and interpretations by several permitting agencies and EPA refute), EPD should exercise its discretion to require Power4Georgians to consider IGCC in its BACT analysis.

**II. THE APPLICATION FAILS TO ADDRESS CARBON DIOXIDE AS A PSD POLLUTANT**

The failure of Power4Georgians’ application to propose a BACT emission limit for carbon dioxide renders the Application fatally flawed.

**A. Carbon Dioxide is a Pollutant Subject to Regulation Under the Clean Air Act For Which EPD Must Conduct a BACT Analysis and Establish BACT Emission Limitations**

The Application’s failure to conduct a BACT analysis for CO<sub>2</sub> violates the requirements of the Clean Air Act, case law, and federal and state regulations. Power4Georgians’ failure to propose BACT limits for this massive new and long-lived source of greenhouse gas pollution is erroneous and unacceptable.

In a landmark ruling, the U.S. Supreme Court recently clarified that EPA—and by extension states such as Georgia that are implementing Clean Air Act programs pursuant to a SIP approved by EPA—has the authority and the obligation to regulate carbon dioxide and other greenhouse gases. Massachusetts v. EPA, 127 S.Ct. 1438, 1459 (2007). The Court held

<sup>31</sup> In the Matter of an Air Pollution Control Construction Permit Issued to Wisconsin Electric Power Company for the Elm Road Generating Station, Permit No. 03-RV-166, located in Oak Creek, Wisconsin, Case No. IH-04-03.

<sup>32</sup> The NSR Manual is considered persuasive authority. See, Order Denying Review, In re: Prairie State Generating Co., PSD Appeal No. 05-05, slip op. 16 (EAB, Aug. 24, 2006).

<sup>33</sup> NSR Manual, B.13.

<sup>34</sup> In re Knauf Fiber Glass GmbH, 8 E.A.D. 121, 1999 EPA App. LEXIS 2, \*38-\*39 (EAB, Feb. 4, 1999) (citing NSR Manual, B.13-B.14).

that EPA may refuse to limit emissions of greenhouse gases only if it finds that these pollutants are not anticipated to contribute to global warming that threatens or endangers human health or welfare. In light of the extensive body of science documenting the serious impacts of global warming pollution, such a finding would be legally indefensible. In fact, as discussed below, EPA's statements and actions in the wake of the Court's decision make clear that it agrees that greenhouse gases ("GHGs"), including CO<sub>2</sub>, contribute to global warming that endangers public health and welfare.

Pursuant to the Court's decision, both EPA and the states have an existing legal obligation to regulate CO<sub>2</sub>, separate and independent from any future federal carbon legislation. This obligation exists now; it is not one that may come into effect some years in the future. Other states are beginning to accept this obligation. For example, the Secretary of the Kansas Department of Health and Environment recently denied an air permit application for two large new coal-fired boilers based on their carbon dioxide emissions.<sup>35</sup> Kansas appropriately recognized that the only way to begin solving the problem is to begin scrutinizing each decision to allow a major new source of greenhouse pollutants. Kansas took the responsible course of action, and Georgia should do no less.

#### **1. BACT Requirements Apply to Each Pollutant Subject to Regulation Under the Act That Is Emitted in Excess of Specified Significance Levels**

Section 165(a)(1) of the Act provides that no new major source may be constructed without a PSD permit.<sup>36</sup> As part of the PSD permitting process, Power4Georgians must conduct a BACT analysis and include in the PSD permit BACT emission limitations "for each pollutant subject to regulation under [the Clean Air Act]" for which emissions exceed specified significance levels.<sup>37</sup> Federal PSD regulations provide that "[a] new major stationary source shall apply best available control technology for a regulated NSR pollutant that it would have the potential to emit in significant amounts."<sup>38</sup> The definition of "major stationary source" includes a fossil fuel-fired steam electric plant of more than 250 million British thermal units per hour heat input which emits, or has the potential to emit, 100 tons per year or more of any regulated NSR pollutant.<sup>39</sup> Plant Washington meets this definition of "major stationary source."

The PSD regulations define "regulated NSR pollutant" as including "any pollutant . . . subject to regulation under the Act." Specifically, the regulation provides that a "[r]egulated NSR pollutant, for purposes of this section, means . . . [a]ny pollutant that otherwise is subject to regulation under the Act . . . ."<sup>40</sup> Thus, as discussed below, regulated pollutants for new source review purposes may include pollutants "subject to" regulation under the Act, even if EPA has not yet regulated them.

<sup>35</sup> [http://www.kdheks.gov/news/web\\_archives/2007/10182007a.htm](http://www.kdheks.gov/news/web_archives/2007/10182007a.htm)

<sup>36</sup> *Id.* § 7475(a)(1).

<sup>37</sup> Clean Air Act, §§ 165(a), 169, 42 U.S.C. §§ 7475(a), 7479; 40 C.F.R. §§ 51.166(b)(2), (b)(23), (b)(39), (b)(49), (j)(3)).

<sup>38</sup> 40 C.F.R. § 51.166(j)(2).

<sup>39</sup> 40 C.F.R. § 51.166(b)(1)(i)(a).

<sup>40</sup> 40 C.F.R. § 51.166(b)(49) (emphasis added).

## **2. Pollutants Subject to Regulation Under the Act Include Both Currently Regulated Pollutants and Pollutants for Which EPA and the States Possess But Have Not Yet Exercised Authority to Regulate**

The Clean Air Act's mandate in Section 165(a)(4) is clear: BACT applies to "each pollutant subject to regulation under [the Act]." EPA has recognized the general principle that "[t]echnically, a pollutant is considered regulated once it is subject to regulation under the Act" and "need not be specifically regulated by a section 111 or 112 standard to be considered regulated."<sup>41</sup> The plain text of § 165(a)(4) thus imposes BACT requirements on any pollutant that is "subject to" regulation under the preconstruction permitting process even if EPA or the permitting authority have not yet established emissions requirements for that pollutant, so long as they possess the authority to do so.

PSD regulations echo the mandate of Section 165(a)(4). The regulations provide that BACT applies not only to air pollutants for which EPA has promulgated national ambient air quality standards under Section 109 of the Act, standards of performance for new sources under Section 111 of the Act, or standards under or established by Title VI of the Act (relating to acid deposition control), but also to "[a]ny pollutant that otherwise is subject to regulation under the Act."<sup>42</sup>

## **3. Carbon Dioxide is a Pollutant Subject to Regulation Under the Act**

The plain language of the Act, federal and state regulations, the Supreme Court's decision in Massachusetts v. EPA, and a recent executive order all clarify that CO<sub>2</sub> is a pollutant "subject to regulation" under the Clean Air Act.

### **a. Carbon Dioxide is a "Pollutant"**

Section 302(g) of the Act defines "air pollutant" expansively to include "any physical, chemical, biological, radioactive . . . substance or matter which is emitted into or otherwise enters into the ambient air." 42 U.S.C. § 7602(g). In Massachusetts v. EPA, 127 S. Ct. 1438 (2007), the Supreme Court held, based on the "unambiguous" language of the Act, that the definition of "air pollutants" includes carbon dioxide and other greenhouse gases. Massachusetts, 127 U.S. at 1460 ("Carbon dioxide, methane, nitrous oxide, and hydrofluorocarbons are without a doubt 'physical [and] chemical . . . substance[s] which [are] emitted into . . . the ambient air.' The statute is unambiguous"). The Massachusetts decision makes clear that carbon dioxide is an "air pollutant" under the Clean Air Act.

As discussed above, the term "subject to regulation," as defined in the Act and its implementing regulations, means not only pollutants that are currently regulated, but pollutants that EPA and the states have the authority or the obligation to regulate. Carbon dioxide is "subject to regulation" under either test—it is currently regulated and it is subject to further regulation under the Act.

---

<sup>41</sup> Change to Definition of Major Source (Final Rule), 66 Fed. Reg. 59,161 (Nov. 27, 2001).

<sup>42</sup> 40 C.F.R. § 51.166(b)(49) (emphasis added).

b. Carbon Dioxide is Currently Regulated Under Various Provisions of the Act

Various provisions of the Clean Air Act already regulate carbon dioxide. For example, section 821 of the Clean Air Act Amendments of 1990 directed EPA to promulgate regulations to require certain sources, including coal-fired power plants, to monitor carbon dioxide emissions and report monitoring data to EPA. 42 U.S.C. § 7651(k) note. In 1993, EPA complied with this mandate by promulgating a suite of regulations addressing carbon dioxide emissions, including regulations requiring: (1) monitoring of carbon dioxide emissions through the installation, certification, operation and maintenance of a continuous emission monitoring system or an alternative method (40 C.F.R. §§ 75.1(b), 75.10(a)(3)); (2) preparation and maintenance of a monitoring plan (40 C.F.R. § 75.33); (3) maintenance of certain records (40 C.F.R. § 75.57); (4) and reporting of certain information to EPA, including electronic quarterly reports of carbon dioxide emissions data (40 C.F.R. §§ 75.60 – 64). The regulations also prohibit operation of an affected source that fails to comply with the substantive requirements of Part 75, and further provides that a violation of any requirement of Part 75 is a violation of the Clean Air Act. 40 C.F.R. § 75.5. Thus, carbon dioxide is currently regulated under the Acid Rain provisions of the Act. See Buckley v. Valeo, 424 U.S. 1, 66-67 (1976) (finding regulation of political speech based on record-keeping and reporting requirements). Carbon dioxide is also subject to regulation under a number of the Clean Air Act's other provisions, including Sections 111 and 202, which require EPA to promulgate regulations limiting emissions of pollutants from new stationary sources.

c. The President's Recent Executive Order Confirms EPA's Authority to Regulate Carbon Dioxide Emissions and Directs EPA to Exercise That Authority

If there were any doubt that carbon dioxide is subject to regulation under the Clean Air Act following Massachusetts v. EPA, 127 S. Ct. at 1459-63, the President's May 14, 2007 Executive Order laid that to rest.<sup>43</sup> The Executive Order reconfirms that EPA can regulate greenhouse gases, including carbon dioxide, from motor vehicles, non-road vehicles and non-road engines under the Clean Air Act. It then directs EPA to coordinate with other federal agencies in undertaking precisely such regulatory action. The President's action indicates strongly that the Chief Executive is of the opinion that carbon dioxide is a "pollutant" and must be further regulated under the Clean Air Act. For all of the above reasons, carbon dioxide is an air pollutant subject to regulation under the Clean Air Act for which EPA must comply with BACT requirements.

**B. Power4Georgians Must Conduct a BACT Analysis and Set a Carbon Dioxide BACT Emission Limitation in the Permit for the Proposed Plant Washington**

EPD cannot lawfully issue a permit for the proposed Plant Washington until it requires Power4Georgians to conduct a BACT analysis for the proposed unit's CO<sub>2</sub> emissions and, based on the BACT analysis, propose BACT emission limitations for those CO<sub>2</sub> emissions.

---

<sup>43</sup> Exec. Order No. 13,432, 72 Fed. Reg. 27,717 (May 16, 2007).

For the BACT requirement to be triggered for a given pollutant, the addition of Plant Washington must result in a net emissions increase of that pollutant that exceeds a specified significance level. The PSD regulations do not list a significance level for CO<sub>2</sub>.<sup>44</sup> For NSR-regulated pollutants that do not have an established significance levels, “any” rate of emissions is defined as significant under both federal and state air quality regulations.<sup>45</sup> In other words, the significance level for CO<sub>2</sub> is anything above zero.

There is no dispute that the Plant Washington would result in a significant net emissions increase of CO<sub>2</sub>. Thus, if permitted, the proposed Plant Washington must comply with BACT requirements for CO<sub>2</sub>. Despite this legal obligation, the Application does not contain a BACT emission limitation for carbon dioxide.

The BACT analysis for CO<sub>2</sub> must include a case-specific review of relevant energy, environmental and economic considerations that is informed by detailed information submitted by the applicant. See 42 U.S.C. § 7479(3); 40 C.F.R. 51.166(b)(12), (n). Based on its BACT analysis, EPD must set emission limitations for CO<sub>2</sub> in any draft permit. See 42 U.S.C. § 7479(3) (BACT means “an emission limitation”); 40 C.F.R. 51.166(b)(12)(same).

The required BACT analysis for carbon dioxide must consider, among other things, use of cleaner fuels, CO<sub>2</sub> capture and sequestration (including CO<sub>2</sub> capture in conjunction with IGCC coal combustion technology, discussed elsewhere in these comments), and any other measures or means of reducing CO<sub>2</sub> emissions (e.g., efficiency improvements, biomass co-firing, etc). While it is not sufficient to simply select an emission limitation used elsewhere without conducting the required analysis, Power4Georgian’s BACT analysis may be informed by the carbon dioxide emission limitations that other states have placed on new coal-fired power plants. California and Washington have both adopted carbon dioxide emission limitations of 1,100 pounds per MW-hr.

Power4Georgian’s failure to conduct a BACT analysis and establish emission limitations for carbon dioxide must be rectified before EPD may lawfully issue a PSD construction permit for the proposed Plant Washington. If EPD does not categorically deny the requested permit at this time, at a minimum, EPD must require Power4Georgians to provide it with all information necessary to conduct a BACT analysis and conduct the BACT analysis before issuing a draft permit containing the required carbon dioxide emission limitations. Further, the public must be provided notice and an opportunity to comment and request a hearing on the revised proposed permit.

### **III. THE PROPOSED MERCURY EMISSIONS LIMIT VIOLATES THE CLEAN AIR ACT AND WOULD HARM PEOPLE’S HEALTH AND THE ENVIRONMENT IN GEORGIA**

Power4Georgians’ Application violates Clean Air Act requirements designed to protect people’s health and would allow Plant Washington to emit excessive levels of mercury pollution into the air in Georgia. As discussed below, the plain language of the Clean Air Act requires EPD and/or Power4Georgians to perform a case-by-case Maximum Achievable

---

<sup>44</sup> 40 C.F.R. § 51.166 (b)(23)(i).

<sup>45</sup> 40 C.F.R. § 51.166(b)(23)(ii).

Control Technology (“MACT”) analysis and adopt as a federally enforceable permit condition the mercury emissions limitation that could be achieved in practice by the best performing source in the category.

Although Power4Georgians has conducted BACT analysis for mercury pursuant to the Georgia Rules for Air Quality Control, Georgia Rules Chapter 391-3-1-.02, this analysis is insufficient in light of a recent decision by the D.C. Circuit Court of Appeals. If granted as written, the Application would violate the Clean Air Act and threaten the health of Georgians who eat fish as a regular part of their diet. Fish consumption restrictions exist on segments of both the Oconee and Ogeechee Rivers, the two rivers situated on both sides of Plant Washington. The levels of mercury in fish in the Ogeechee River are high enough that they have triggered a Total Maximum Daily Load (TMDL) in the river. According to this TMDL, ninety-nine percent of the mercury entering the food chain in the Ogeechee River comes from air pollution.<sup>46</sup> Given Plant Washington’s proximity to the Ogeechee and Oconee Rivers, EPD should refuse to permit the Plant or, at a minimum, require that Power4Georgians perform the required case-by-case MACT analysis and implement the MACT level of control for mercury.

**A. The Clean Air Act Requires Plant Washington to Meet Maximum Available Control Technology Emissions Limits for Mercury**

The Clean Air Act requires that EPD impose facility-specific MACT limits for mercury emissions from Plant Washington. In the 1990 Clean Air Act Amendments, Congress directed EPA to conduct a study of hazardous air pollution (“HAP”) emissions from power plants, report to EPA within three years on the results of that study, and regulate power plant HAP emissions under § 112 if the study demonstrated that it was “appropriate and necessary” to regulate power plants under § 112 in order to protect public health. 42 U.S.C. § 7412(n)(1)(A).

Based on extensive scientific evidence—including EPA’s Mercury Study and studies by the National Academy of Sciences—EPA concluded in December 2000 that “regulation of [mercury] emissions from coal- and oil-fired electric utility steam generating units under section 112 is appropriate and necessary ... because, as documented in the [Mercury Study] electric utility steam generating units are the largest domestic source of mercury emissions, and mercury in the environment presents significant hazards to public health and the environment.”<sup>47</sup> Concurrently, EPA added coal- and oil-fired power plants to the § 112(c) list of industries for which EPA must develop maximum pollution control rules.<sup>48</sup> Having placed power plants on the § 112(c) list, EPA was required to issue within two years standards to reduce HAP emissions from power plants to the maximum extent achievable.<sup>49</sup> The MACT standards of § 112(d) then required newly constructed power plants to reduce their mercury emissions by the maximum extent achievable, a level not to be less than the best controlled similar source. 42 U.S.C. § 7412(d)(3). During the time it took EPA to develop MACT

---

<sup>46</sup> Region 4 US Environmental Protection Agency. 2004. Total Maximum Daily Load for Total Mercury in Ogeechee River, available at [www.epa.gov/region4/mercury/documents/ogeecheeHgTMDL.pdf](http://www.epa.gov/region4/mercury/documents/ogeecheeHgTMDL.pdf)

<sup>47</sup> 65 Fed. Reg. 79,825, 79,830 (Dec. 20, 2000) (emphasis added).

<sup>48</sup> *Id.* at 79,830-31.

<sup>49</sup> 42 U.S.C. § 7412(c)(5)&(d).

standards for new and existing power plants, the appropriate regulatory authorities—EPD, in this case—were required to impose in any air permits issued for new sources, “on a case-by-case basis,” an emission limitation equivalent to the MACT standard “that would apply to each source if an emission standard had been promulgated.” 42 U.S.C. § 112(g).

In March 2005, however, EPA abruptly retracted its December 2000 findings and “delisted” power plants from § 112. Without new data to support its about-face, EPA exempted power plants from § 112 requirements,<sup>50</sup> and instead promulgated the “Clean Air Mercury Rule” (“CAMR”), a cap-and-trade approach to power-plant mercury pollution. Rather than requiring the maximum achievable reductions through § 112(d), CAMR established for new sources a “New Source Performance Standard” (“NSPS”) that is far less stringent than emissions control levels already achieved in practice by some existing sources.

Despite EPA’s attempt to skirt the requirements of § 112 by unlawfully removing power plants from the Section 112(c) list of covered sources and substituting the weak cap-and-trade provisions of CAMR in their place, the Clean Air Act requires strict emission limits for mercury under the MACT standards of § 112. Accordingly, a broad-based coalition of states, environmental groups, Indian tribes, and public health organizations challenged EPA’s “Delisting Rule” and CAMR in the D.C. Circuit Court of Appeals as an unlawful agency effort to exempt coal-fired power plants from the most stringent Clean Air Act requirements for major sources of hazardous air pollution. See New Jersey v. EPA, - F.3d -, 2008 WL 341 (D.C.Cir. 2008). On February 8, 2008, the D.C. Circuit held that EPA had improperly removed coal-fired power plants from the § 112 hazardous air pollution source list.<sup>51</sup> The Court vacated EPA’s Delisting Rule, and held that by necessity this (1) reinstates EPA’s December 2000 “appropriate and necessary” finding and listing decision; and (2) invalidates, and requires vacatur of, CAMR (and the cap and trade approach to mercury regulation).

**B. Power4Georgians Has Not Performed the Required MACT Analysis for Mercury**

In April of 2007, Georgia promulgated a Clean Air Mercury Rule based on the federal CAMR. One provision of this rule, entitled “Mercury Emissions from New Electric Utility Steam Generating Units,” requires sources that had not submitted complete air quality permit applications before January 1, 2007 to install BACT to control mercury emissions.<sup>52</sup> In accordance with this provision, Power4Georgians has included a BACT analysis for mercury in their permit application and proposed BACT controls for Plant Washington.

In light of the D.C. Circuit’s February 8<sup>th</sup> ruling, however, more is required. Since the D.C. Circuit concluded that EPA’s attempt to remove coal-fired power plants from the section 112(c) list was unlawful and thus a legal nullity, “EGUs remain listed under section 112.”<sup>53</sup> Within two years of listing a source category, Clean Air Act § 112(c)(5) requires EPA to develop and promulgate MACT standards under § 112(d), which strictly limits the amount of mercury pollution new and existing coal-fired power plants can lawfully emit. Since its

<sup>50</sup> 70 Fed. Reg. 15,994 (March 29, 2005).

<sup>51</sup> New Jersey v. EPA, 2008 U.S. App. LEXIS 2797.

<sup>52</sup> Ga. Comp. R. & reg. r.391-3-1-.02(2)(ttt)(1).

<sup>53</sup> New Jersey v. EPA, 2008 U.S. App. LEXIS 2797, \*25

Delisting Rule is a legal nullity and EGUs have “remain[ed] listed” under § 112 since December 2000, EPA has already missed the two year deadline for promulgating nationally applicable MACT standards for new and existing sources. Moreover, in the interim period while EPA develops these MACT standards, § 112(g) requires all proposed new sources—such as Plant Washington—to perform a case-by-case MACT analysis and meet the emissions limitation that could be achieved in practice by the best performing source in the category.<sup>54</sup>

Power4Georgians has not conducted a MACT analysis, nor has it identified the emission limits achievable with MACT controls, proposed MACT control requirements in the application, or provided the public an opportunity to comment on any such analyses or controls. Under the circumstances, it would not only be unlawful, it also would be irresponsible, a waste of limited public resources, and an unacceptable threat to the health and environment of Georgia’s citizens to issue a permit without requiring Power4Georgians to perform a case-by-case MACT analysis. Once this analysis is performed, EPD should require the most stringent level of hazardous air pollutant controls found achievable under MACT and should provide the public an adequate opportunity to comment on the proposed MACT controls.

#### **IV. THE APPLICATION FAILS TO CONTAIN MACT ANALYSES OR LIMITS FOR OTHER HAPS THAT WILL BE EMITTED BY PLANT WASHINGTON.**

In light of the D.C. Circuit’s recent ruling, Power4Georgians must also conduct a MACT analysis for any other HAPs that will be emitted, including any such HAPs listed in section 112(b) of the Clean Air Act. Because EGUs remain on the 112(c) list in light of the D.C. Circuit’s ruling in New Jersey, EPA must develop MACT standards for other EGU HAP emissions within the next two years. The D.C. Circuit has declared the duty to develop MACT emission standards includes a “clear statutory obligation to set emissions standards for each . . . HAP [listed in CAA §112(b)].” National Lime Ass’n v. EPA, 233 F.3d 625, 634 (D.C. Cir. 2000); see also NRDC v. EPA, 376 U.S. App. D.C. 528 (D.C. Cir. 2007).

Power4Georgians’ application does not conduct a MACT analysis for other HAPs commonly emitted from EGUs, which include arsenic, beryllium, cadmium, lead, dioxins, and many other pollutants.<sup>55</sup> As with mercury, until such time as EPA develops these standards, sources such as Plant Washington are required to do a case-by-case MACT analysis for all HAPs emitted pursuant to Clean Air Act section 112(g). EPD must require Power4Georgians to conduct this analysis and must allow the public the opportunity to comment on the findings and proposed controls before any draft permit may be issued.

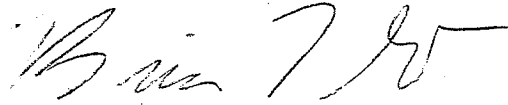
For all of the reasons stated herein, we respectfully request that the Plant Washington Application be returned to the applicant for the additional analyses described in these

<sup>54</sup> See 42 U.S.C. § 7412(g)(2); 40 CFR sec. 63.40(c) (stating that the requirements of section 112(g) apply to coal-fired EGUs at “such time as these units are added to the source category list pursuant to section 112(c)(5) of the Act.”).

<sup>55</sup> Study of Hazardous Air Pollutants Emissions from Electric Utility Steam Generating Units- Final Report To Congress, available at <http://www.epa.gov/ttn/oarpg/t3/reports/eurtc1.pdf>.

comments. We also request that a public hearing be held on any draft permit issued for this project. Thank you for your consideration of this important matter.

Sincerely,

A handwritten signature in black ink, appearing to read "Brian Gist", with a stylized flourish at the end.

Brian Gist  
Catherine Wannamaker  
Southern Environmental Law Center

CC: Heather Abrams (by U.S. Mail)